



Problem Statement



Undetected Fatigue

Drivers frequently underestimate fatigue, resulting in slower reactions and impaired decision-making.



Variability in Drowsiness Signs

Drowsiness varies among individuals, hindering the development of a universal detection system.



Real-time Monitoring

Develop distraction-free real-time monitoring for drivers.



IIT GANDHINAGAR



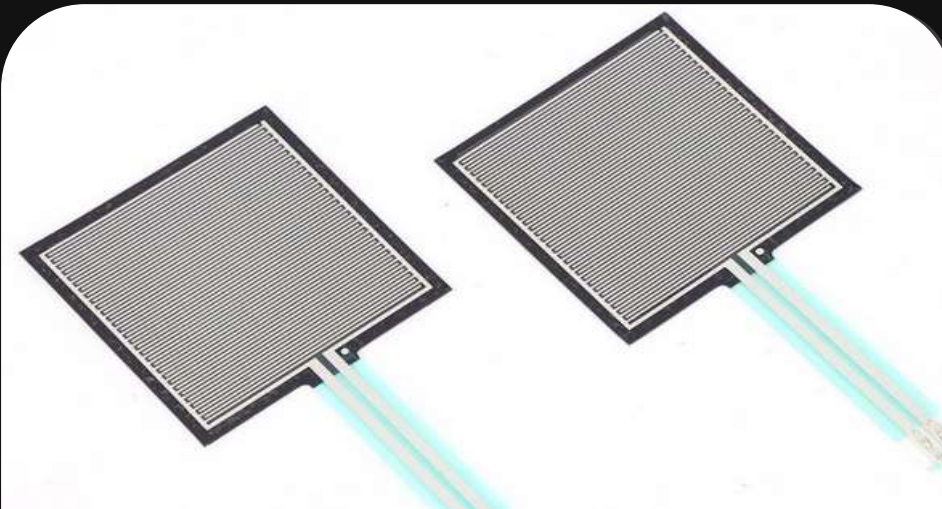
By Group-2

Stay Alert, Stay Safe: Introducing DrowSee

- ❑ Strategically placed sensors on the steering wheel
- ❑ Utilizes eye detection technology
- ❑ Monitors subtle changes indicating drowsiness
- ❑ Provides effective alerts
- ❑ Reliable and essential addition to any vehicle



Components and Working



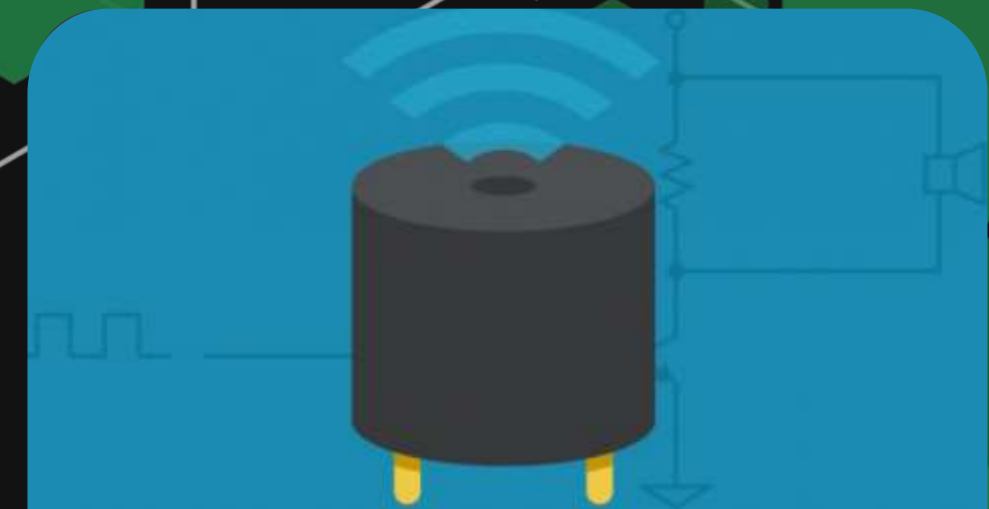
Pressure Sensor

Two pressure sensors on the steering which detect the pressure variation



Eye Sensor

Cameras used to detect blink rate



Alarm

A buzzer that gives the final audio output, which wakes you up when you are sleepy





Business Model

Key Partners

- Automotive companies
- Insurance companies
- Fleet Management Companies

Customer Segments

- Commercial Drivers
- Late-Night Workers
- Normal vehicle drivers
- People who suffer from drowsiness

Revenue Streams

- Licensing fees from automotive manufacturers and insurance companies
- Product Sales from individual customers

Cost Structure

- Research and Development
- Marketing
- Support and Maintenance

Existing Solutions : **Honda Motors, KIA, Mahindra, LG**

Limitations:

- **False Alarms**

False alarms may be generated due to bright lights and sudden movements

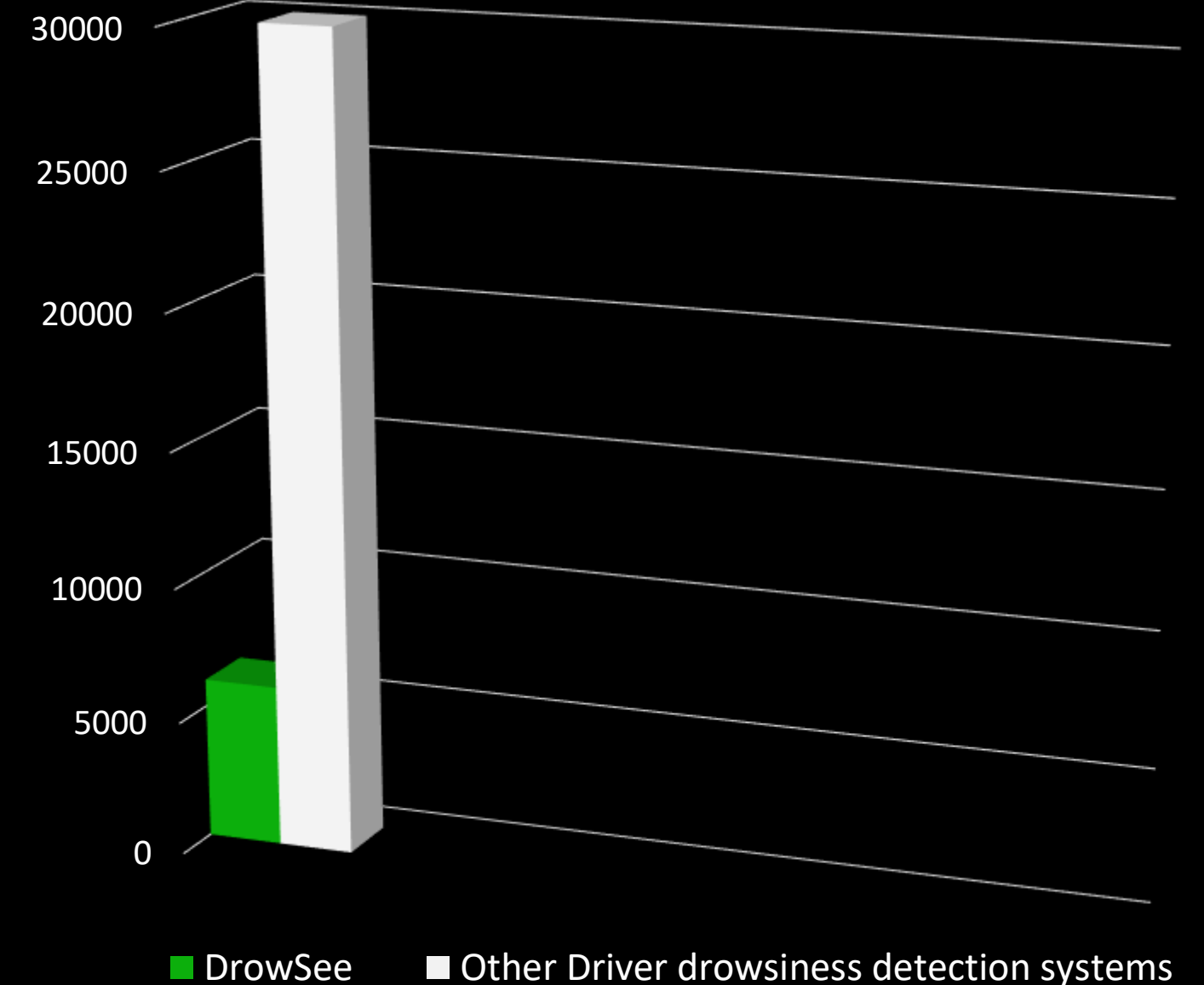
- **Cost**

High-end models with advanced features are very expensive

- **Compatibility with different vehicles**

Existing solutions are not compatible with all vehicle models

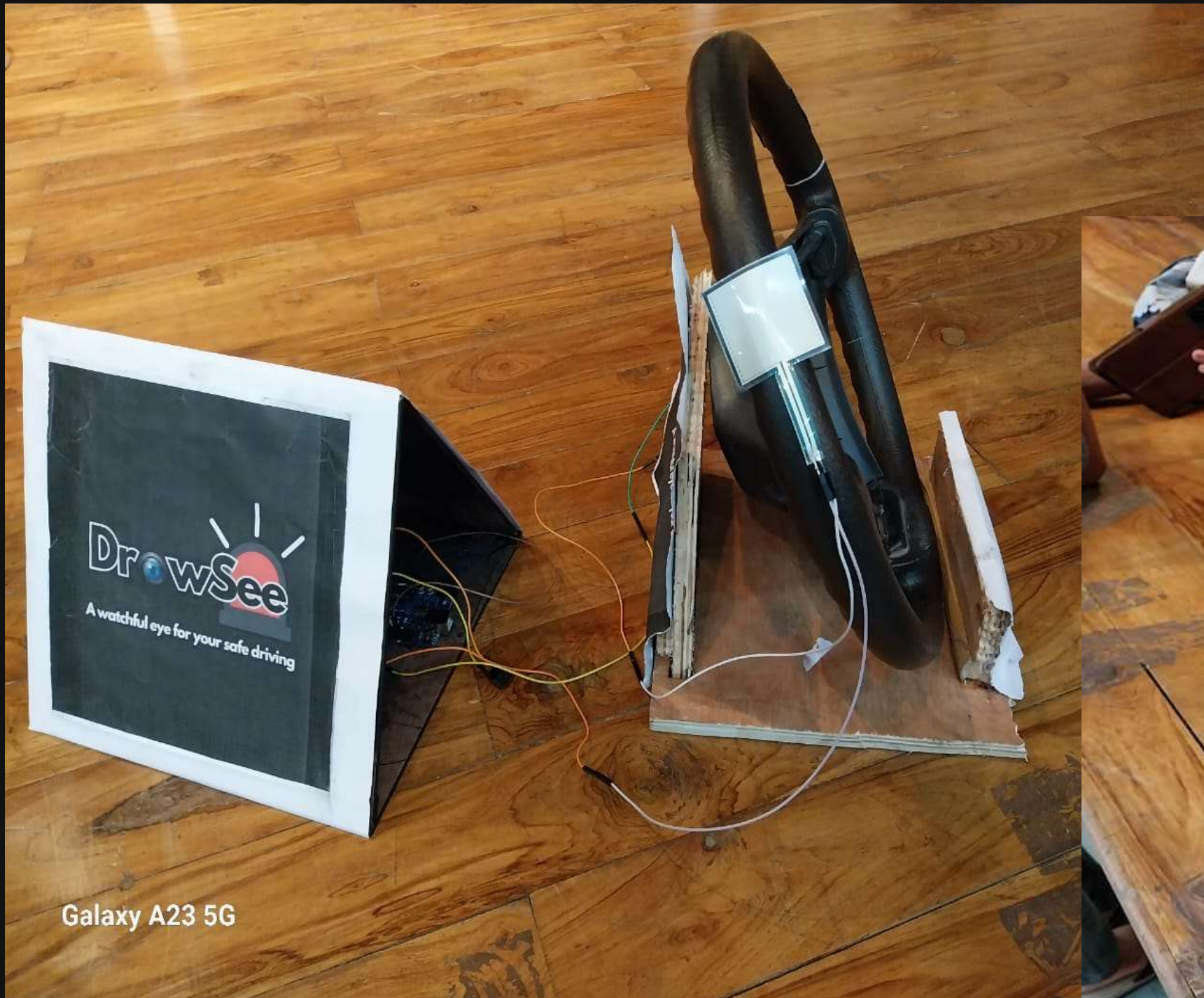
Cost Comparison



Future Prospects

- ☐ Enhancing sensor precision
- ☐ Integrating vibration pads beneath the seat
- ☐ Implementing a self-learning model for continuous improvement
- ☐ Developing a real-time data monitoring app
- ☐ Upgrading to advanced cameras
- ☐ Head Tilt Detection System





Galaxy A23 5G



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Thank You

